

ABSTRACT

Either associated process control or discrete process control is selected for valve timing control according to the engine operation state. Under the associated process control, the target displacement angle INP of an intake camshaft (22) is computed according to the engine operation state, and the actual displacement angle INR of the camshaft (22) is brought closer to it. Further, based on the target valve overlap amount OVP computed according to the engine operation state and the actual displacement angle INR, the target displacement angle EXP of an exhaust camshaft (23) is computed, and the actual displacement angle EXR of the camshaft (23) is brought closer to it. Under the discrete process control, the target displacement angles INP, EXP are computed according to the engine operation state, and the actual displacement angles INR, EXR are brought closer to them.